to be distorted in said radiation-sensitive material, [said] an improved method comprising the steps of:

[(a) depositing a radiation-sensitive material on said substrate;]

([b] a) providing a first rectilinear mask image segment, said first rectilinear mask image segment having a first set of mask edges, all opposing mask edges in said first set of mask edges being spaced a distance greater than the ~~Raleigh~~ Rayleigh limit of said imaging tool and greater than the distance between said first and second edges, a single edge from said first set of mask edges [which corresponds] corresponding to said first edge;

([c] b) exposing said first rectilinear mask image segment with radiation using [an] said imaging tool such that said single edge from said first set of mask edges [to produce] produces a first pattern edge gradient [, said first pattern edge gradient] defining said first edge of said two-dimensional feature in said material;

([d] c) providing a second rectilinear mask image segment, said second rectilinear mask image segment having a second set of mask edges, all opposing mask edges in said second set of mask edges being spaced a distance greater than said ~~Raleigh~~ Rayleigh limit of said imaging tool and greater than said distance between said first and second edges, a single edge from said second set of mask edges [which corresponds] corresponding to said second edge;

([e] d) exposing said second rectilinear mask image segment with radiation using [an] said imaging tool such that said single edge from said second set of mask edges [to produce] produces a second pattern edge gradient [, said second pattern edge gradient] defining said second edge of said two-dimensional feature in said material, wherein said first and second edges are separated by distance which is less than or equal to the Rayleigh limit of said imaging tool and wherein said second pattern edge gradient and said first pattern edge gradient do not interact;

([f] e) developing said radiation-sensitive material, thereby reproducing said [two-dimensional] feature on said substrate.

(LJV/cl 8/5/91)

12. (Amended Twice) In a process for fabricating semiconductor devices, including a method of lithographically printing a rectangular feature on a mask into a photoresist layer deposited over a semiconductor substrate utilizing an imaging tool, said rectangular feature having at least two [closely spaced] opposing feature edges each having associated edge gradients, said at least two opposing feature edges being spaced such that said associated edge gradients interact causing said feature to be distorted in said photoresist layer, [said] an improved method comprising the steps of:

decomposing said rectangular feature into a rectangular mask image having a pair of opposing mask edges of a length which is greater than or equal to the length of said opposing feature edges, said opposing mask edges being spaced apart a predetermined distance which is greater than the spacing between said opposing feature edges and greater than the ~~Raleigh~~ Rayleigh limit of said imaging tool;

exposing a first one of said [mask edges] pair of opposing mask edges with radiation using [an] said imaging tool to produce a first pattern edge gradient which defines a first one of said feature edges in said photoresist layer;

offsetting said rectangular mask image relative to said substrate;

exposing the second one of said [mask edges] pair of opposing mask edges with radiation using [an] said imaging tool to produce a second pattern edge gradient defining the second one of said feature edges in said photoresist layer, wherein said spacing between said opposing feature edges is less than or equal to the ~~Raleigh~~ Rayleigh limit of said imaging tool and wherein said second pattern edge gradient and said first pattern edge gradient do not interact.

(LJV/cl 8/5/91)